

REMARKS

Claims 1 – 153 are presently pending. In the above-identified Office Action, the Examiner objected to Claims 81, 97 and 112 - 117 under 35 CFR 1.75 (c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claims 64 – 153 were rejected under 35 U.S.C. 112, first paragraph as failing to comply with the enablement requirement. Claims 1 – 3, 10, 11, 25, 26, 45, 50, 58, 59, 61 and 63 were rejected under 35 U.S.C. § 102(b) as being anticipated by Smith *et al.* ('370) hereinafter 'Smith'. Claim 51 was rejected under 35 U.S.C. § 102(b) as being anticipated by Billingsley ('932). Claims 1 – 3, 6 – 9, 15, 16, 24 – 26, 29 – 31, 45, 48 – 50, 58 – 61 and 63 were rejected under 35 U.S.C. § 102(b) as being anticipated by Rosander ('545). Claims 1, 2, 10, 11 and 14 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sutton ('273). Claims 4, 5, 27, 28, 47, 48 and 62 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith. Claims 4 and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rosander. Claims 12 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sutton. Claims 52 - 57 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Billingsley. Claims 1 – 6, 10, 11, 15 – 25 and 36 – 44, were rejected under 35 U.S.C. § 103(a) as being unpatentable over Billingsley in view of Smith. Claims 128 – 136, 138 and 139 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ehara ('129). Claims 140 - 153 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ehara, as applied to Claims 128 – 136, 138 and 139 above, and further in view of Kroon ('506). Claims 64 – 74, 88, 91 – 93, 98 – 103, 105, 107, 109, 111, 118, 120 – 123 and 137 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ehara, as applied to Claims 128 – 136, 138 and 139 above, and further in view of Rosander. Claims 75 – 87, 90, 91, 95, 96, 103 – 111, 119, 122 – 127 were

rejected under 35 U.S.C. § 103(a) as being unpatentable over Billingsley, as applied to Claims 52 - 54 above, and further in view of Ehara and Rosander.

By this Amendment, Claims 1 – 153 have been canceled. New Claims 154 to 162 have been presented for consideration. For the reasons set forth more fully below, Applicant respectfully submits that the Application properly presents Claims patentable over the prior art. Reconsideration, allowance and passage to issue are respectfully requested.

The invention addresses the need in the art for an efficient apparatus system and method for maximizing the signal to noise ratio and phase information of a captured sound signal when converting sound energy to an electrical signal. This is achieved with a novel arrangement comprising first and second acoustic transducers mounted on a support arm to convert a pressure wave into an electrical signal. The said transducers are positioned on the support arm at a separation distance to simulate sound reception at human ears on a human head facing a sound source.

In a specific embodiment, the transducers are coupled to an amplifier via a short conductor at a sound capture module.

The invention is set forth in Claims of varying scope of which Claim 154 is illustrative. Claim 154 recites:

154. A sound capture device comprising:
 a support arm and
 first and second transducers adapted to convert a pressure wave
 into an electrical signal, said transducers being positioned on said
 support arm at a separation distance to simulate sound reception at
 human ears on a human head facing a sound source. (Emphasis added.)

The references cited but not applied have been carefully considered. None of the references, including those cited but not applied, taken alone or in combination, teaches, discloses or suggests the invention as presently claimed. Specifically, none of the references teaches, discloses or suggests a sound capture device with first and second transducers mounted on a **support arm** at a separation distance to simulate sound reception at human ears on a human head facing a sound source.

In the above-identified Office Action, the Examiner cited several references of which Smith and Billingsley are most relevant to the present Claims. Smith was cited as teaching the location of an amplifier close to a microphone transducer. Billingsley was cited as teaching binaural sound. However, none of these references teaches an arrangement for providing binaural sound **using a support arm** as presently claimed.


The support arm of the inventive sound capture system enables the spacing between transducers to be optimized for a given application. Further, the support arm allows the pointing angles of the transducers to be changed.

As set forth in new Claims 154 – 162, other novel features of the invention include the location of an amplifier at a module along with the transducers and the connection of the amplifier to the transducers via a short connector.

Hence, Applicant respectfully submits that the present Claims define an invention patentable over the prior art. Reconsideration, allowance and passage to issue are requested.

Respectfully submitted,
Kenton Michael Fuqua

By


William J. Benman
Attorney for Applicant
Registration No. 29,014

WJB/ns

Benman, Brown & Williams
2049 Century Park East, Suite 2740
Los Angeles, CA 90067

(310) 553-2400
(310) 553-2675 facsimile